

## ABSTRACT

This invention provides compositions and methods for increasing cellular respiration  
5 of melanized catecholamine neurons, and methods for alleviating symptoms or stopping  
appearance and/or progression of symptoms of Parkinson's disease and related conditions,  
characterized by nigrostriatal degeneration, as well as drug-induced dyskinesias, tardive  
dyskinesia, Neuroleptic Malignant Syndrome, and negative symptoms of schizophrenia. An  
effective amount of a neuromelanin-binding composition having a quinoline ring in a suitable  
10 pharmaceutical carrier is administered to patient in need of such treatment. Preferably the  
composition comprises (-)-chloroquine diphosphate. Selected adjuvants are also provided as  
part of the compositions of this invention.